

## CLAIMS:

1. A method of processing an electronic payment cheque that relates to a transfer of an amount of money from an account of a first user in a first banking institute (500) to an account of a second user in a second banking institute (550), which processing includes generating digital signatures by means of asymmetric encryption using an asymmetric key pair comprising a private key and a public key, characterized in that, the method comprises the following steps:
- in a first SIM card (101a) of the first user, creating an electronic payment cheque and signing the electronic payment cheque with a first signature generated by means of a first private key of a first asymmetric key pair, which first private key resides on the first SIM card (101a) hosted by a first mobile equipment (101b) ,
- via the first mobile equipment (101b) hosting the SIM card (101a) of the first user, transmitting the signed electronic payment cheque to a second SIM card (102a) hosted in a second mobile equipment (102b) of the second user,
- in the second SIM card (102a), signing the electronic payment cheque, which has been signed with the first signature, with an additional second signature generated on the second SIM card (102a) by means of a second private key of a second asymmetric key pair, which second private key resides on the second SIM card (102a) hosted by the second mobile equipment (102b),
- transmitting the electronic payment cheque signed with the first and the second digital signatures from the second mobile equipment (102b) to a central hub (300), which central hub (300) is in communication with the first and the second banking institutes (500, 550),

in the central hub (300), initiating a deposit of the amount of money in the electronic payment cheque into the account of the second user by initialising a verification of the second signature at the banking institution (550) of the second user and a verification of the first signature at the banking institution  
5 of the first user (500).

2. A method according to claim 1, wherein the first and the second private key are generated on the first and the second SIM card (101a, 102a), respectively.  
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3. Method according to claim 1, wherein the transmittal of the signed electronic payment cheque from the first mobile equipment (101b) hosting the SIM card (101a) of the first user to the second SIM card (102a) hosted in a second mobile equipment (102b) of the second user, is performed via a  
15 digital mobile telephone system.

4. A method according to any of the claims 1 to 3, wherein the signed payment cheque is transmitted as a Short Message by means of the Short Message Service system over the GSM system.  
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5. A method according to any of the claims 1 to 3, wherein the signed payment cheque is transmitted as a Short Message by means of Ir, Bluetooth or Wi-Fi standards.

25 6. A method according to any of the claims 1 to 5, wherein creating of an electronic payment cheque comprises indicating a telephone number associated to the second SIM card (102a), an amount to be transferred and an index to the account, wherefrom the amount should be withdrawn.

30 7. A method according to any of the claims 1 to 6, wherein the method further comprises:

via the first mobile equipment (101b), prompting the first user to confirm creation of an electronic payment cheque, which prompting is initiated at the first SIM card (101a) hosted by the first mobile equipment (101b).

- 5 8. A method according to claim 7, wherein the conformation comprises entering of a PIN-RSA number.

9. A method according to any of the claims 1 to 8, wherein the encrypted electronic payment cheque is transmitted via a message proxy in the central  
10 hub (300).

10. A method according to claim 9, wherein the encrypted electronic payment cheque at the message proxy is converted to an SMS Point-to-point data download message, which subsequently is transmitted to the second SIM  
15 card hosted by the second mobile equipment.

11. A method of issuing an electronic payment cheque that relates to a transfer of an amount of money from an account of a first user in a first banking institute (500) to an account of a second user in a second banking  
20 institute (550), which issuing includes generating a digital signature by means of asymmetric encryption using an asymmetric key pair comprising a private key and a public key, characterized in that, the method comprises the following steps:

- 25 in a first SIM card (101a) of the first user, creating an electronic payment cheque and signing the electronic payment cheque with a first signature generated by means of a first private key of a first asymmetric key pair, which first private key resides on the first SIM card (101a) hosted by a first mobile equipment (101b) ,

- 30 via the first mobile equipment (101b) hosting the SIM card (101a) of the first user, transmitting the signed electronic payment cheque to a second SIM card (102a) hosted in a second mobile equipment (102b) of the second user.

12. A method according to claim 11, wherein the first private key is generated on the first SIM card (101a).

5 13. Method according to claim 11 or 12, wherein the transmittal of the signed electronic payment cheque from the first mobile equipment (101b) hosting the SIM card (101a) of the first user to the second SIM card (102a) hosted in a second mobile equipment (102b) of the second user, is performed via a digital mobile telephone system.

10 14. A method according to any of the claims 11 to 13, wherein the signed payment cheque is transmitted as a Short Message by means of the Short Message Service system over the GSM system.

15 15. A method according to any of the claims 11 to 14, wherein the signed payment cheque is transmitted as a Short Message by means of Ir, Bluetooth or Wi-Fi standards.

20 16. A method according to any of the claims 11 to 15, wherein creating of an electronic payment cheque comprises indicating a telephone number associated to the second SIM card (102a), an amount to be transferred and an index to the account, wherefrom the amount should be withdrawn.

25 17. A method according to any of the claims 11 to 16, wherein the signed electronic payment cheque is transmitted via a message proxy.

30 18 A method according to claim 17 wherein the signed electronic payment cheque at the message proxy is converted to an SMS Point-to-point data download message, which subsequently is transmitted to the second SIM card (102a) hosted by the second mobile equipment (102b).

19. A method of depositing a received electronic payment cheque that relates to a transfer of an amount of money from an account of a first user in a first banking institute (500) to an account of a second user in a second banking

institute (550), which processing includes generating digital signatures by means of asymmetric encryption using an asymmetric key pair comprising a private key and a public key, characterized in that, the method comprises the following steps:

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in the second SIM card (102a), signing the received electronic payment cheque, which has been signed with a first signature, with an additional second signature generated on the second SIM card (102a), by means of a second private key of a second asymmetric key pair, which second private  
10 key resides on the second SIM card (102a) hosted by the second mobile equipment (102b),

transmitting the electronic payment cheque signed with the first and the second digital signatures from the second mobile equipment (102b) to the  
15 central hub (300), which central hub (300) is in communication with the first and the second banking institutes (500, 550),

in the central hub (300), initiating a deposit of the amount of money in the electronic payment cheque into the account of the second user by initialising  
20 a verification of the second signature at the banking institution (550) of the second user and a verification of the first signature at the banking institution (500) of the first user.

20. A method according to claim 19, wherein the second private key is  
25 generated on the second SIM card (102a).

21. A method according to claim 19 or 20, wherein the signed received payment cheque is transmitted as a Short Message by means of the Short Message Service system over the GSM system.

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22. A method according to any of the claims 19 to 21, wherein the signed received electronic payment cheque is transmitted via a message proxy in the central hub (300).